

DRAFT

Poosey

Conservation Area

Ten-Year Area Management Plan
FY 2015-2024



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OVERVIEW

- **Official Area Name:** Poosey Conservation Area, #7935
- **Year of Initial Acquisition:** 1979
- **Acreage:** 5,863 acres
- **County:** Livingston
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**

A. Strategic Direction

To manage, restore, and enhance a unique and diverse north Missouri landscape of upland communities, and associated wildlife species, while providing quality and compatible outdoor recreational and educational opportunities.

B. Desired Future Condition

The desired future condition of Poosey Conservation Area (CA) is a mosaic of diverse forest, woodland, and grassland communities in the north part of the area and a grassland/agricultural complex in the south that provides high-quality upland bird habitat. The areas immediately surrounding Indian Creek Community Lake are healthy forest and woodland communities that support a healthy watershed for the lake.

C. Federal Aid Statement

This area, or a portion thereof, was acquired with Pittman-Robertson Wildlife Restoration funds to restore and manage wildlife, conserve and restore suitable wildlife habitat and provide public access for hunting or other wildlife-oriented recreation.

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

A. Priority Areas: The *Northwest Region Quail and Grassland Bird Recovery Plan* (Missouri Department of Conservation, 2005) identified Poosey CA as one of five Quail Emphasis Areas in the northwest region. The main focus is to maximize usable space for bobwhite quail on the conservation area in order to provide ideal habitat conditions, where feasible. In addition, the conservation area serves as the core for the larger Poosey Quail Focus Area.

B. Natural Areas: None

II. Important Natural Features and Resources

- A. Species of Conservation Concern:** Species of conservation concern are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist
- B. Caves:** None
- C. Springs:** None
- D. Other:** Four significant communities have been identified: dry-mesic prairie, mesic sandstone forest, moist sandstone cliff and limestone/dolomite savanna. Poosey CA lies within the Trenton Woodland/Forest Scarped Hills Landtype Association (Nigh & Schroeder, 2002).

III. Existing Infrastructure

- 19 parking lots (5 Americans with Disabilities Act (ADA) accessible)
- 3 primitive campgrounds
- 2 boat ramps (1 concrete, 1 gravel)
- Fishing dock (ADA accessible)
- Fish cleaning station (ADA accessible)
- 5 privies (ADA accessible)
- 1 unstaffed shooting range
- 1 shelter house
- 4.75 miles of access roads (maintained by Design and Development)
- 6.4 miles of service roads (maintained by conservation area staff)
- 28.2 miles of multi-use trail (maintained by conservation area staff and in cooperation with partner groups)
 - 11.2 mile Green Hills trail (hike/bike)
 - 17 miles multi-use trail (hike/bike/horse)
- 1 house/residence with detached garage
- 4 equipment/storage buildings (3 enclosed)

IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations:** As a condition of purchase, the Missouri Department of Conservation (the Department) agreed to designate all lands in Section 22, Township 59 North, Range 25 West situated above and east of the flood pool of Indian Creek Community Lake as a “no shooting/hunting zone.”
- B. Federal Interest:** Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. Federal funds may also be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the

State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.

- C. **Easements:** Jackson Township of Livingston County and Jefferson Township of Grundy County have road easements for all township roads adjoining or passing through the area. Electric and waterline easements exist on the area. Farmer's Electric Cooperative and Kansas City Power and Light have electric line maintenance easements and Public Water Supply District #4 of Livingston County has water line maintenance easements (Figure 2).
- D. **Cultural Resources Findings:** Yes, records kept with the Department Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.
- E. **Hazards and Hazardous Materials:** None observed.
- F. **Endangered Species:** None observed.
- G. **Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Prairie/Grassland Management: There are over 900 acres of grassland on Poosey CA. The vast majority is composed of a mix of native warm-season grasses and forbs. The remainder are classified as cool-season grasses, including fescue and brome, with some hay fields.

Challenges and Opportunities:

- 1) Control exotic, invasive species (fescue, sericea lespedeza, etc.).
- 2) Increase the diversity of forb species.
- 3) Improve grassland structure (bare ground, vegetation height, spacing, etc.).

Management Objective 1: On appropriate sites, manage for diverse plant communities, consisting of native, warm-season grasses and forbs that will provide habitat for grassland-dependent wildlife. Improve/maintain diversity of species and structure.

Strategy 1: Utilize a variety of management techniques to improve and maintain diversity of species and structure. Techniques include, but are not limited to, spraying, prescribed burning, mechanical treatments, disking, mowing, haying, grazing and seeding. (Forestry, Wildlife)

Strategy 2: Control exotic, invasive plants using appropriate techniques and monitor for new occurrences. (Forestry)

Strategy 3: Where feasible, cool-season grass fields should be converted to wildlife-friendly cool-season grasses or to native grass and forb mixes that complement habitat management goals. (Forestry)

Forest/Woodland Management: Poosey CA contains 3,078 acres of forest and woodland habitats that cover over 50 percent of the area. The conservation area is divided into three compartments (Figure 3). Each compartment is inventoried every 15 years. Management prescriptions for each stand are based on the findings of the inventory. The majority of the forested habitats are upland communities, consisting of oak-hickory forests. The remainder includes bottomland communities of maple, hackberry, ash and elm. Woodland/savanna habitats (i.e., wooded habitats with an open canopy, sparse understory and higher percentage of grasses and forbs) on Poosey CA are rare at present, but were more common historically. Some areas were identified as having potential for restoration and are in various stages of management (Figure 4).

Challenges and Opportunities:

- 1) Maintain forest health.
- 2) Identify and control invasive forest pests.
- 3) Manage the woodland community.
- 4) Maintain and improve forested wildlife habitat.

Management Objective 2: On appropriate sites, manage forest and woodland communities to provide healthy and diverse habitats for forest/woodland-dependent wildlife.

Strategy 1: Conduct inventories on forest/woodland compartments according to the inventory schedule to develop prescriptions for ecological and silvicultural treatments. (Forestry)

Strategy 2: Monitor for the presence of invasive forest pests and plants. (Forestry)

Strategy 3: Utilize a variety of sustainable forest management techniques to promote healthy forest and woodland communities including, but not limited to, timber harvesting, timber stand improvement, firewood cutting, salvage cuttings, tree planting, seeding and prescribed burning. (Forestry)

Strategy 4: Maintain a diversity of timber age classes that will provide both a diversity of wildlife habitat as well as resiliency to living and non-living (fire, weather, climate) damaging agents. (Forestry)

Strategy 5: Utilize Best Management Practices during timber harvest as described in the Department's manuals: *Missouri Watershed Protection Practice* manual (Missouri Department of Conservation, 2014b) and the *Missouri Forest*

Management Guidelines Voluntary Recommendations for Well-Managed Forests
(Missouri Department of Conservation, 2014a). (Forestry)

Cropland and Food Plot Management: Over 700 acres of Poosey CA is managed as cropland or food plot. These areas provide an additional source of food for wildlife, a diversity of habitat types and an economical means of controlling succession. A variety of crops are grown; the most common include soybeans, corn, wheat and milo.

Challenges and Opportunities:

- 1) Manage cropland that contributes to quality upland bird habitat.
- 2) Maintain and manage food plots for other game species (e.g., deer, turkey, dove).

Management Objective 3: Utilize cropping to provide early successional habitat and high energy food sources for wildlife.

Strategy 1: Use the contract permittee system to economically manage crops and food plots. (Forestry, Wildlife)

Strategy 2: Manage crop and food plots according to sound soil conservation principles. (Forestry, Wildlife)

Strategy 3: Regularly rotate crop fields into an idle state to provide nesting and brood rearing habitat for upland birds. (Forestry, Wildlife)

Strategy 4: Establish food plots with a variety of crops (e.g., grain, forage and green browse). Seek to provide food for wildlife throughout the seasons.

(Forestry, Wildlife)

Old Field Management: Approximately 826 acres of Poosey CA are considered old field. These areas are not dominated by any one vegetation type, but are usually a mix of grasses, annual weeds, small trees and shrubs. They are in the early stages of plant succession and, if managed correctly, provide quality upland habitat.

Challenges and Opportunities:

- 1) Control exotic invasive species (fescue, autumn olive, sericea lespedeza, etc.).
- 2) Control woody growth and maintain accessibility to fields.
- 3) Increase the amount of bare ground.

Management Objective 4: Manage old fields to provide a balance of bare ground, warm- and cool-season grasses, annual forbs and shrubs to maintain and improve upland habitat.

Strategy 1: Utilize a variety of management techniques to eliminate or control undesirable grasses, provide bare ground, encourage annual forbs and promote areas of shrubby growth. Techniques will include, but are not limited to, spraying,

prescribed burning, mechanical treatments, woody cover removal, disking, mowing, haying, grazing, planting and seeding. (Forestry, Wildlife)

Strategy 2: Control exotic invasive plants using appropriate techniques and monitor for new occurrences of invasive species. (Forestry)

VI. Aquatic Resource Management Considerations

Poosiey CA contains two significant lakes: 192-acre Indian Creek Community Lake and 18-acre Pike's Lake. Pike's Lake was built in the 1950s and is the oldest impoundment on the area. Indian Creek Community Lake was built in 1987 and opened to public fishing in February 1992. There are 62 additional acres of fishable waters at the various sized ponds through the conservation area. There are also numerous wildlife watering holes. As well, the area includes over 30 miles of intermittent or permanent streams. The only named creeks in the area are the South Fork of Gee's Creek (in the northern part of the area) and Indian Creek (in the southern part of the area). The majority of Indian Creek is covered by the Indian Creek Community Lake impoundment (Figure 5).

Challenges and Opportunities:

- 1) Provide a variety of fishing opportunities (species, sizes, etc.).
- 2) Provide bank-fishing access on ponds and the larger lakes.
- 3) Manage Indian Creek Lake watershed for good water quality and monitor water quality.
- 4) Aging facilities, such as the ADA-accessible fishing dock at Indian Creek Lake.
- 5) Establish and maintain adequate riparian corridors.

Management Objective 1: Monitor and manage Indian Creek and Pike's Lakes to provide sustainable and diverse fishing opportunities; maintain water quality; and maintain accessibility for users of all abilities.

Strategy 1: Periodically inventory fish populations to assess health and recommend needed regulation changes. (Fisheries)

Strategy 2: Periodically monitor water quality in Indian Creek Lake and its watershed. (Fisheries)

Strategy 3: Monitor for occurrences of invasive species. (Fisheries, Forestry)

Strategy 4: Repair and maintain the ADA-accessible fishing dock at Indian Creek Community Lake. (Fisheries, Forestry, Design and Development)

Management Objective 2: Monitor and manage area ponds to provide sustainable and diverse fishing opportunities.

Strategy 1: Periodically inventory fish populations to assess health and recommend needed regulation changes. (Fisheries)

Strategy 2: Monitor for occurrences of invasive species. (Fisheries, Forestry)

Strategy 3: Mow, as needed, to provide accessibility for bank fishing. (Forestry)

Management Objective 3: Implement and maintain beneficial riparian corridor practices, as outlined in the Department's *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation* (Missouri Department of Conservation, 2009).

Strategy 1: Periodically monitor habitat conditions of area streams. (Fisheries, Forestry)

Strategy 2: Identify riparian corridors that need to be widened and establish appropriate vegetation using tree planting, direct seeding or allowing natural regeneration. (Forestry)

VII. Public Use Management Considerations

The area receives high public use due to a variety of outdoor activities that are available. Public use opportunities at the area include hunting, fishing, hiking, biking, horseback riding and recreational camping. The area is centrally located for several school districts; many educational field trips by schools/groups have been held at the area.

Challenges and Opportunities:

- 1) Balance user opportunity and minimize user conflict.
- 2) Maintain the multi-use trails (on the northern part of area) that have erosion and other sustainability issues.
- 3) Enforce area regulations and discourage the misuse of the area (e.g., littering, off-trail riding, etc.).
- 4) Provide educational opportunities for schools, groups and individuals.
- 5) Work with local groups (e.g., Audubon, Green Hills Trail Association., etc.).

Management Objective 1: Maintain and improve multi-use trails for appropriate uses. Trails should be sustainable and require minimal maintenance.

Strategy 1: Maintain the partnership with the Green Hills Trail Association for the upkeep and improvement of the Green Hills Trail. (Forestry)

Strategy 2: Conduct an assessment of the condition of the trails north of Highway A. Identify problem erosion areas and sections that need re-routing to improve sustainability and reduce maintenance. (Forestry, Design and Development)

Strategy 3: Identify and reach out to local horseback riding individuals and/or groups to facilitate communication about trail improvements. (Forestry)

Strategy 4: Update and maintain accurate signage on all trails consistent with Department guidelines. (Forestry)

Management Objective 2: Facilitate educational and interpretive opportunities for schools, groups and the general public.

Strategy 1: Annually hold the Poosey Fall Driving Tour to engage the public and highlight management activities occurring on the area. (Forestry)

Strategy 2: Provide areas for field trips (through special-use permits) for schools and groups, when not in conflict with hunting seasons or other area users. (Forestry, Outreach and Education)

Strategy 3: Place signage, where significant management activity has occurred, to inform area users about resource management practices. (Forestry)

Strategy 4: Provide demonstration areas of resource management for landowners (especially those in the Poosey Quail Focus Area). (Forestry, Private Land Services)

Management Objective 3: Cooperatively patrol the area and report unauthorized activities.

Strategy 1: Regularly patrol and enforce the wildlife code, with emphasis on off-trail abuse, vandalism, littering and response to public complaints. (Protection, Forestry)

Management Objective 4: Inform the public about area regulations.

Strategy 1: Maintain signs according to Department policy. (Forestry)

Strategy 2: Maintain accurate and timely information on the Department's Atlas Database. Review information annually. (Forestry)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain area infrastructure.
- 2) Maintain accurate signage and property lines.
- 3) Acquire inholdings, where appropriate.

Management Objective 1: Maintain area infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with Department guidelines and at currently identified maintenance level (2). (Forestry)

Strategy 2: Replace older block-style privies with modern privy style, for ease of maintenance and safeguarding of water quality. (Design and Development, Forestry)

Management Objective 2: Maintain clearly identified property lines.

Strategy 1: Inspect and maintain boundaries on a regular cycle. (Forestry)

Strategy 2: Resolve boundary issues with adjoining landowners as they arise. (Forestry)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers.

Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

(Forestry)

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Terrestrial Resource Management										
<i>Objective 1</i>										
Strategy 1			X						X	
Aquatic Resource Management										
<i>Objective 1</i>										
Strategy 1		X		X		X		X		
Strategy 4										X
<i>Objective 2</i>										
Strategy 1	X					X				
<i>Objective 3</i>										
Strategy 1									X	
Public Use Management										
<i>Objective 1</i>										
Strategy 2				X						

APPENDICES

Area Background:

Poosey CA is in northwest Livingston County, 6 miles southeast of Jamesport, 9 miles northeast of Lock Springs, 12 miles southwest of Trenton and 13 miles northwest of Chillicothe. The Department purchased the original 814-acre tract for Poosey CA in 1979 from Robert Daugherty. Additional purchases have increased the area to its current size of 5,863 acres. The area contains unique fern-draped rock bluffs, heavily-timbered hills of oak and hickory, rolling grass expanses and a variety of wildlife. The foliage provides brilliant and showy fall colors.

This portion of the Grand River Valley was one of the last parts of Missouri yielded by Native Americans. In 1833, the last remnants of the Shawnee tribe left the area, opening the area to settlement by people of European extraction, who came here via Kentucky, Tennessee and Virginia. The settlers, who preferred forested tracts to open prairies, were attracted by plentiful natural supplies of food, fuel, water and building materials. The area's rugged landscape reminded some of the settlers of Kentucky's Poosey region, giving rise to the area's name. The area continues to be known as the "Kingdom of Poosey," and travelers, asking directions to it, are usually informed that it is "just ahead over the next hill."

With its combination of hardwood forests and tallgrass prairie, the area supports a thriving plant and animal community. Deer, turkey, raccoons, squirrels, quail, rabbits, coyotes, foxes and many other small animals and birds are commonly seen here.

Nestled among the steep tree-covered hills, in the southern portion of Poosey CA, is 192-acre Indian Creek Community Lake, which was constructed in 1987. The lake features an ADA-accessible floating fishing dock.

The area also contains a shooting range, which features 25-, 50- and 100-yard firearms targets. The range is located in the northwest portion of the area.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Upland Forest	2,820		48
Old Fields	826		14
Warm-Season Grass Fields	763		13
Cropland/Food Plot	718		12
Impounded Water	272		5
Bottomland/Riparian Forest	258		4
Cool-Season Grass and Hay	177		3
Savanna/Woodland	29		<1
Total	5,863		100
Stream Frontage		30.3	

References:

Missouri Department of Conservation. (2005). *Northwest region quail and grassland bird recovery plan*. St. Joseph, Missouri: Northwest Region of the Missouri Department of Conservation.

Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, Missouri: Missouri Department of Conservation.

Missouri Department of Conservation. (2014a). *Missouri forest management guidelines voluntary recommendations for well-managed forests*. Jefferson City, Missouri: Conservation Commission of the State of Missouri.

Missouri Department of Conservation. (2014b). *Missouri watershed protection practice recommended practices for Missouri forests: 2014 management guidelines for maintaining forested watersheds to protect streams*. Jefferson City, Missouri: Conservation Commission of the State of Missouri.

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Easements

Figure 3: Forest Compartments

Figure 4: Savanna/Woodland Units

Figure 5: Aquatic Resources

Figure 6: Habitat Cover Types

Figure 1: Area Map

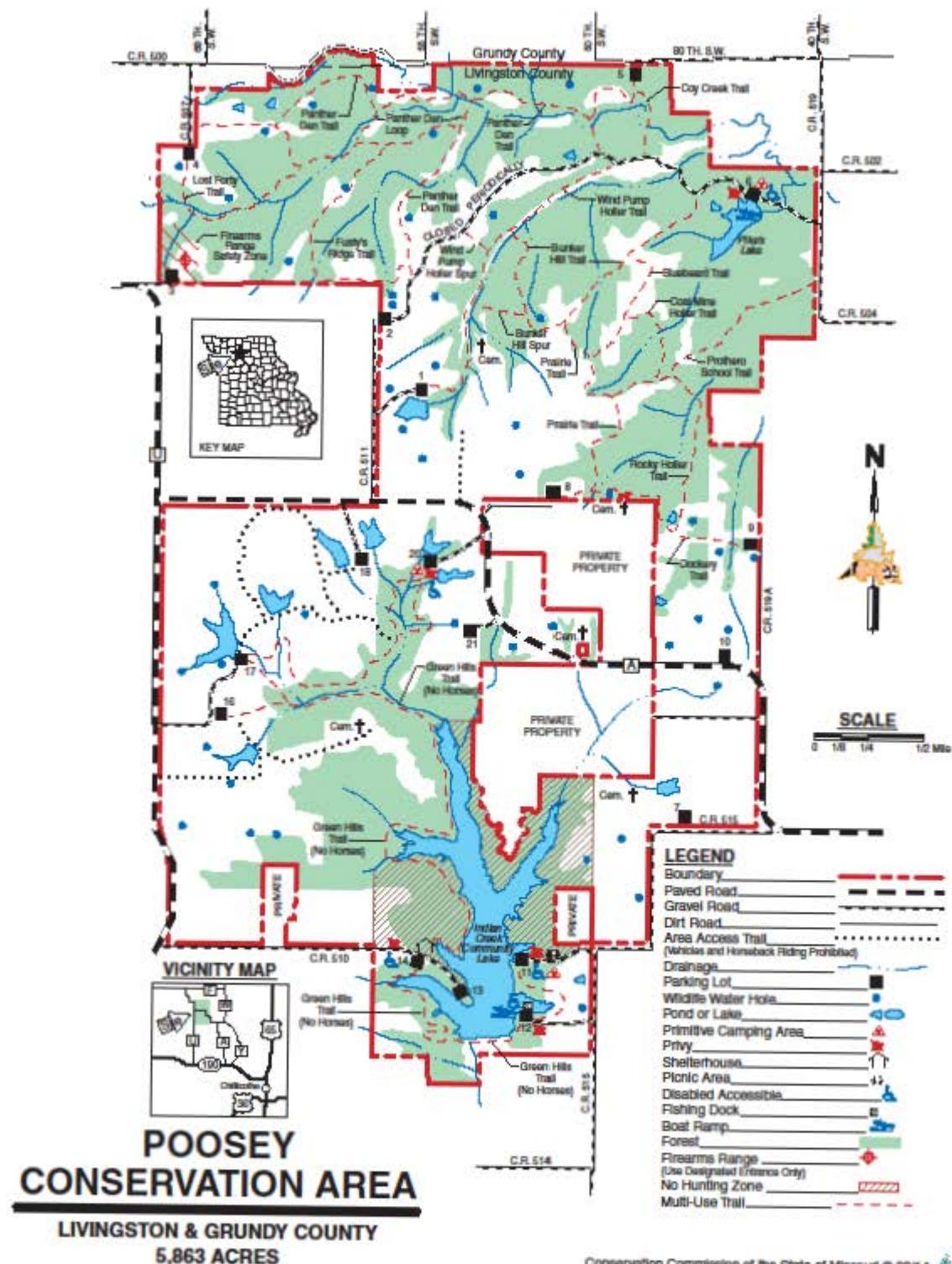


Figure 2: Easements

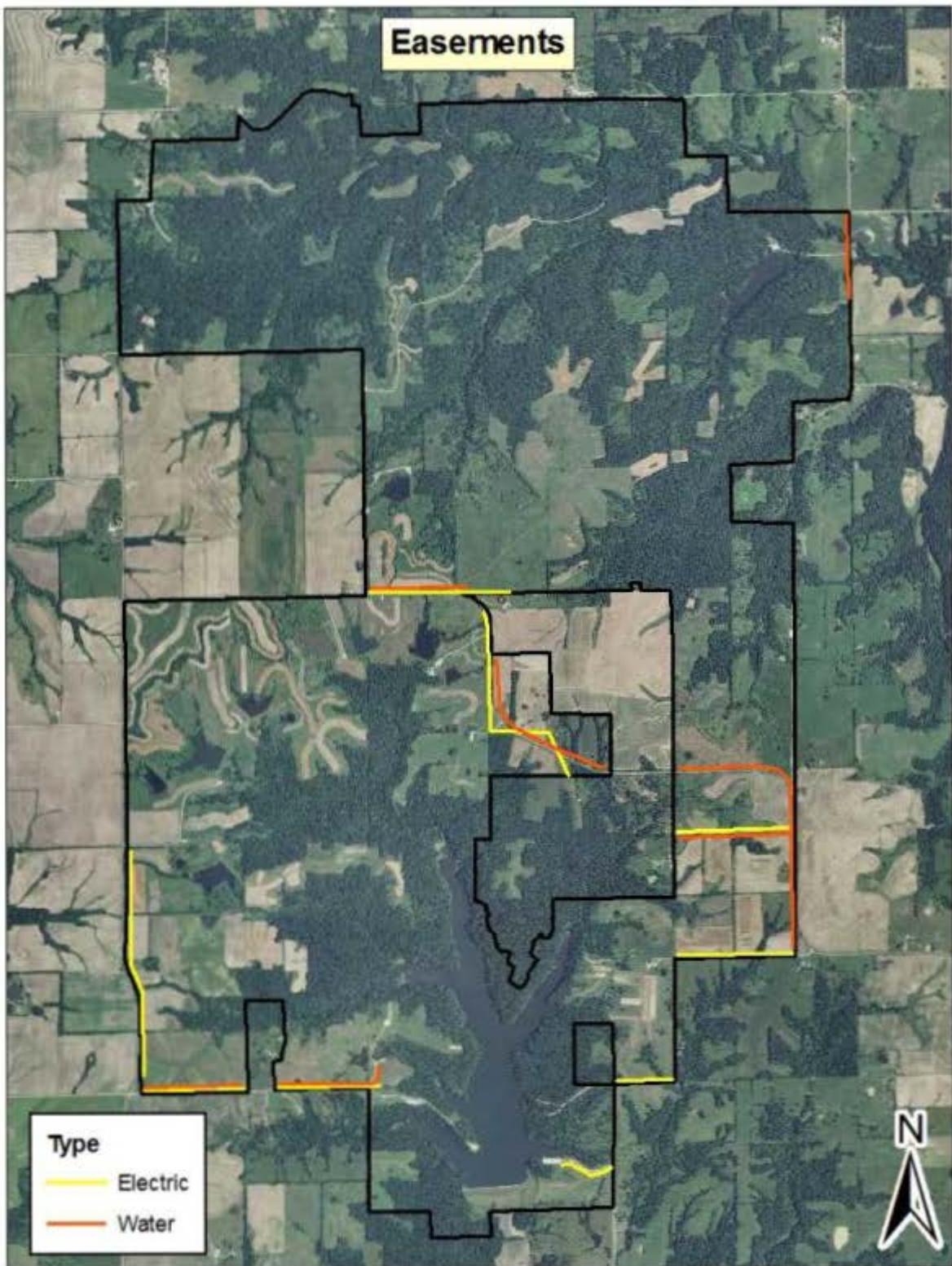


Figure 3: Forest Compartments

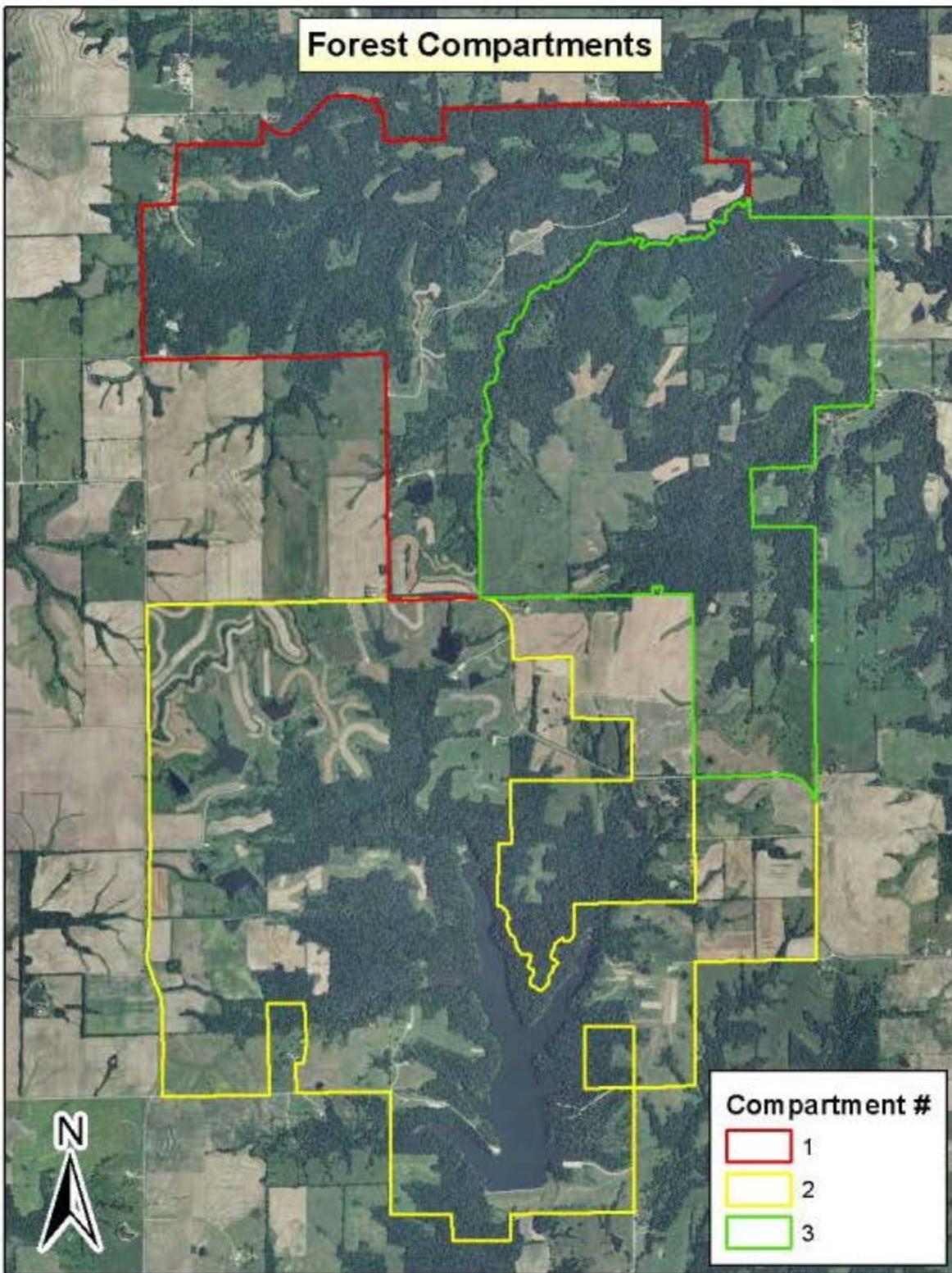


Figure 4: Savanna/Woodland Management Units

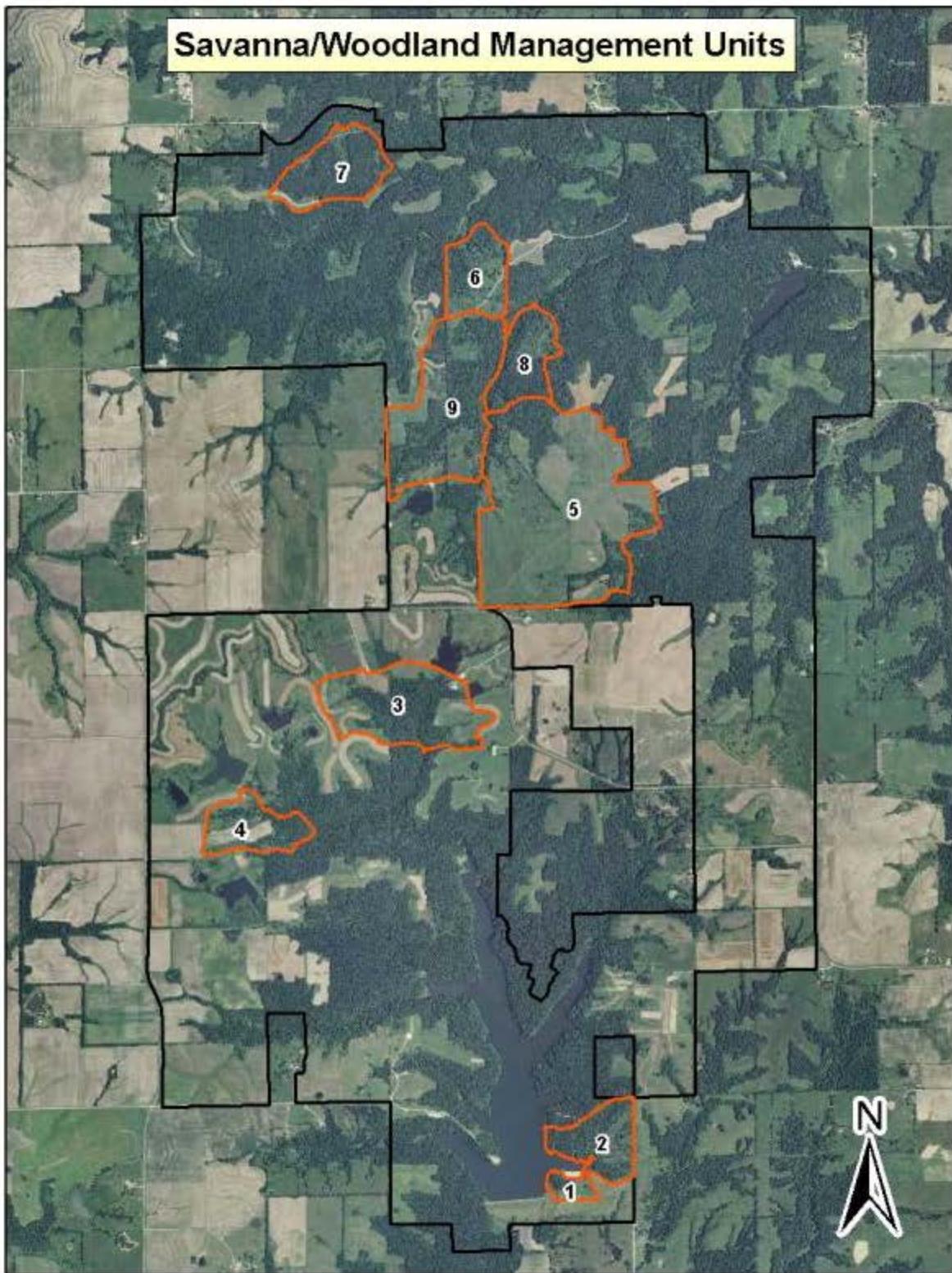


Figure 5: Aquatic Resources

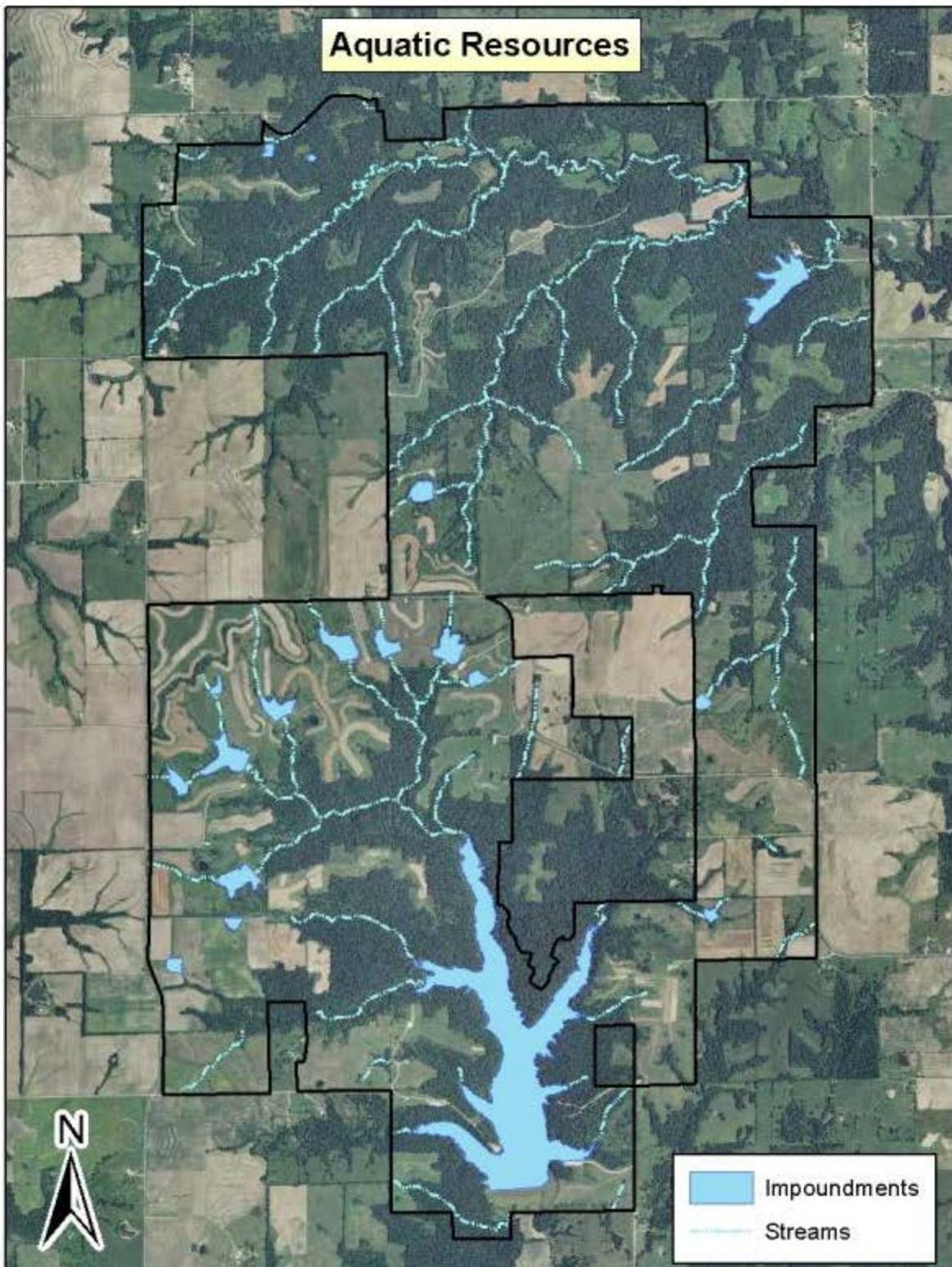
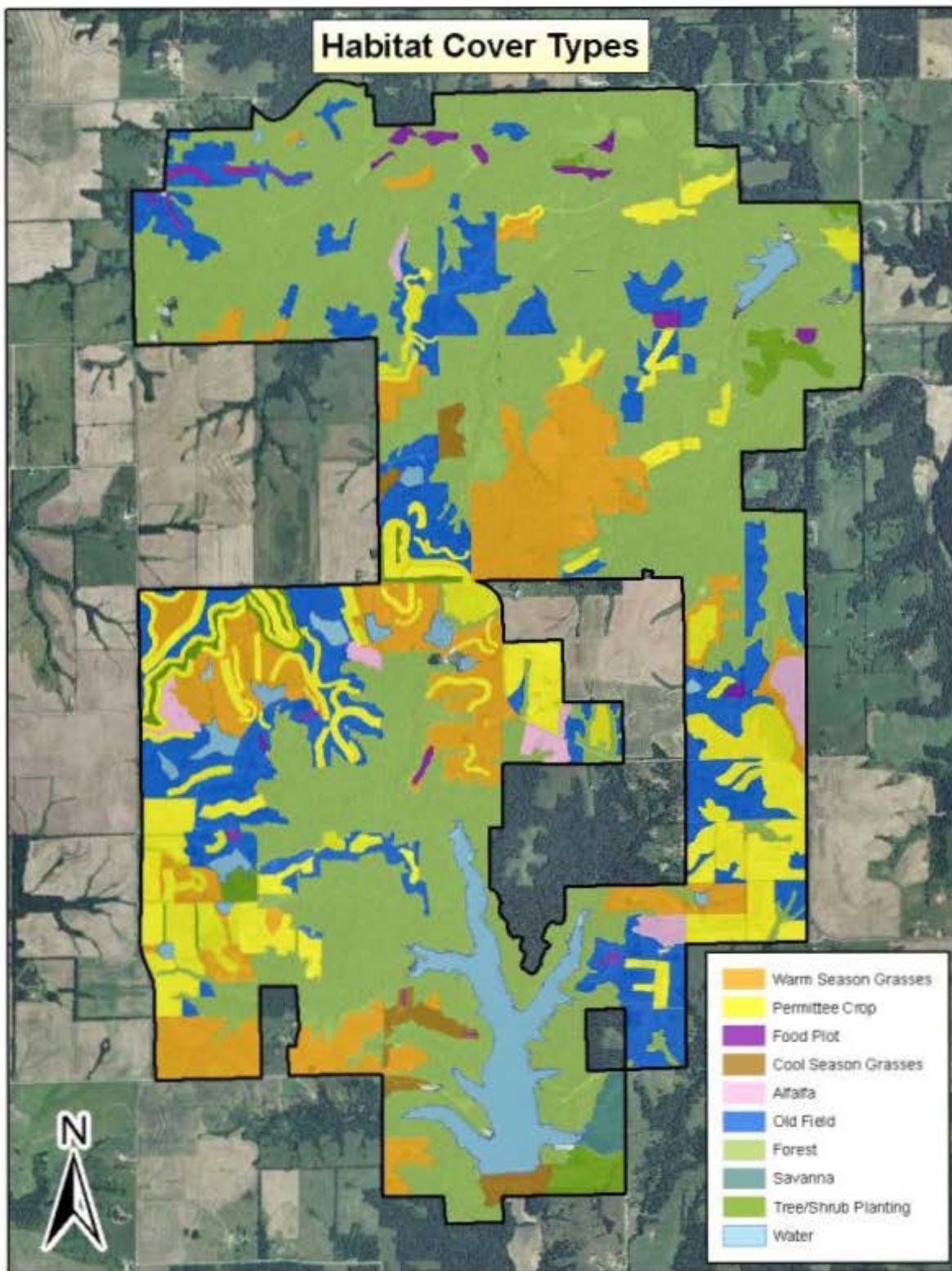


Figure 6: Habitat Cover Types



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